

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Canceled)

2. (Currently Amended) ~~The multiplexer according to claim 1,~~

A multiplexer for packetizing a plurality of encoded data streams, the multiplexer comprising:

means for inserting a time stamp to be used for reproduction of the encoded data streams into a first packet;

means for multiplexing a second packet packetized from the first packet;

means for detecting the number of skipped frames from the encoded data stream; and

means for generating a time stamp to be inserted into the first packet on the basis of the detected number of skipped frames,

wherein the number of skipped frames is detected on the basis of the time difference between a current frame of the encoded data stream and a past frames prior to the current frame.

3. (Original) The multiplexer according to claim 2, wherein said means for detecting detects a first local time stamp added to the current frame of the encoded data

stream and a second local time stamp added to the past frame prior to the current frame.

4-6. (Canceled)

7. (Currently Amended) ~~The multimedia communication apparatus according to claim 6,~~

A multimedia communication apparatus comprising:

means for individually encoding a plurality of media streams having time correlation to output encoded media streams respectively;

means for packetizing respectively said encoded media streams to create a first packet;

means for detecting the number of skipped frames from the encoded media streams;

means for generating a time stamp on the basis of the number of detected skipped frames;

means for inserting the time stamp into the first packet;

means for multiplexing a second packet packetized from the first packet to output transmission streams; and

means for transmitting the transmission streams to a transmission channel,

wherein said means for detecting detects the number of skipped frames on the basis of the time difference between a current frame of the coded media streams and the past frames prior to the current frame.

8. (Original) The multimedia communication apparatus according to claim 7, wherein said means for detecting detects the time difference on the basis of a first local time stamp added to the current frame of the encoded media streams and a second local time stamp added to the past frame prior to the current frame.

9-11. (Canceled)

12. (Currently Amended) ~~The method for generating a time stamp according to claim 11,~~

A method of generating a time stamp which is applied to a multiplexer, the method comprising the steps of:

packetizing a plurality of encoded data streams,

inserting a time stamp to be used for reproduction of the encoded data streams into a first packet;

multiplexing a second packet packetized from the first packet;

detecting the number of skipped frames from the encoded data streams; and

providing a time stamp to be inserted into the first packet on the basis of the number of skipped frames which have been detected,

wherein the step of detecting the number of skipped frame includes the steps of:  
determining a time difference between a current frame of the encoded information data streams and past frame prior to the current frame; and

detecting the number of skipped frames on the basis of the determined time difference.

13. (Original) The method for generating a time stamp according to claim 12, wherein the step of determining time difference in the step of detecting the number of skipped frame determines the time difference on the basis of a first local time stamp added to the current frame of the encoded data streams, and a second local time stamp added to the past frame prior to the current frame.

14-16. (Canceled)

17. (Currently Amended) ~~The multimedia data encoding apparatus according to claim 16,~~

A multimedia data encoding apparatus, comprising:

means for encoding multimedia data to generate encoded multimedia data;

first packetizing means for packetizing the encoded multimedia data into a first packet;

means for inserting a first time stamp to be used for reproduction of the multimedia data into the first packet;

means for detecting the number of skipped frames from the encoded multimedia data;

means for generating a second time stamp to be inserted into the first packet  
instead of the first time stamp on the basis of the detected number of skipped frames;

and

second packetizing means for packetizing the first packet into a second packet,

wherein:

the encoded multimedia data includes a plurality of frames each having a local  
time stamp; and

the detecting means detects the number of skipped frames on the basis of a local  
time stamp of the current frame and a local time stamp of the past frame prior to the  
current frame.

18. (Canceled) .

19. (Currently Amended) ~~The multimedia data encoding apparatus according to~~  
~~claim 18,~~

A multimedia data encoding apparatus, comprising:

means for encoding multimedia data to generate encoded multimedia data;

first packetizing means for packetizing the encoded multimedia data into a  
packetized elementary stream (PES) packet;

means for inserting a first time stamp to be used for reproduction of the  
multimedia data into the PES packet;

means for detecting the number of skipped frames from the encoded multimedia  
data;

means for generating a second time stamp to be inserted into the PES packet  
instead of the first time stamp on the basis of the detected number of skipped frames;

and

second packetizing means for packetizing the PES packet into a transport stream  
(TS) packet.

wherein:

the encoded multimedia data includes a plurality of frames each having a local  
time stamp; and

the detecting means detects the number of skipped frames on the basis of a local  
time stamp of the current frame and a local time stamp of the past frame prior to the  
current frame.